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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,357	12/21/2001	Robert T. Mason JR.	ABME-0739/E20010060	6443

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EXAMINER

FAN, CHIEH M

ART UNIT	PAPER NUMBER
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2634

11

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/037,357

Applicant(s)

MASON ET AL.

Examiner

Chieh M Fan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,5,12-14 and 20 is/are allowed.
- 6) ☒ Claim(s) 6-11 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. More specifically, although the examiner does not agree with the applicants' argument that the references are combined without a suggestion to do so because the Agee reference clearly suggests combining diversity technique with frequency hopping to provide protection against multipath fading and partial-band jamming, yet the examiner agrees that the references do not teach communicating groups of data bytes that each comprises a subset of the data message over the predetermined sequence of data channels where the number of bytes in each group is determined based on a number of channels and a number of time the data messages are to be transmitted.

### ***Specification***

2. The disclosure is objected to because of the following informalities: "In accordance with" in line 9 of page 7 (line 3 from the bottom of paragraph 00030) should be changed to --- in accordance with ---.

Appropriate correction is required.

***Claim Objections***

3. Claims 2-4, 6-11 and 15-19 are objected to because of the following informalities:

Regarding claim 2, "a predetermined number of preamble channels" in lines 1-2 should be changed to --- the predetermined number of preamble channels ---.

Regarding claim 6, "a predetermined number of preamble channels" in line 2 should be changed to --- the predetermined number of preamble channels ---.

Regarding claim 7, "the preamble channel" in line 2 should be changed to --- the preamble channels ---.

Regarding claim 10, "a predetermined number of preamble channels" in line 2 should be changed to --- the predetermined number of preamble channels ---.

Regarding claim 15, "a predetermined number of preamble channels" in line 2 should be changed to --- the predetermined number of preamble channels ---.

Regarding claim 18, "a predetermined number of preamble channels" in line 2 should be changed to --- the predetermined number of preamble channels ---.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 6-11 and 15-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 6, the recited limitation “transmitting a preamble over a predetermined number of preamble channels further comprises transmitting a redundant preamble together with said preamble” does not have support from the specification, because paragraphs 00031 and 00032 clearly teach the preamble and the redundant preamble are transmitted over different channels. They are not transmitted together.

Regarding claim 10, for the reason applied to claim 6 above, the claimed limitation does not have support from the specification.

Regarding claim 11, the claimed limitation “investigating, at a receiver, the predetermined number of preamble channels to search for the preamble and the redundant preamble” has no support from the specification, because paragraph 00032 clearly teach the preamble and the redundant preamble are obtained from different channels (i.e., preamble channels and redundant preamble channels). The limitation “the predetermined number of preamble channels” cannot cover the preamble channels and the redundant preamble channels because the predetermined number of preamble channels are used to transmit the preamble as specifically recited in claim 1.

Regarding claim 15, the recited limitation “transmitting a preamble over a predetermined number of preamble channels comprises transmitting a redundant preamble together with said preamble” does not have support from the specification, because paragraphs 00031 and 00032 clearly teach the preamble and the redundant preamble are transmitted over different channels. They are not transmitted together.

Regarding claim 18, for the reason applied to claim 15 above, the claimed limitation does not have support from the specification.

Regarding claim 19, the claimed limitation “investigating, at a receiver, the predetermined number of preamble channels to search for the preamble and the redundant preamble” has no support from the specification, because paragraph 00032 clearly teach the preamble and the redundant preamble are obtained from different channels (i.e., preamble channels and redundant preamble channels). The limitation “the predetermined number of preamble channels” cannot cover the preamble channels and the redundant preamble channels because the predetermined number of preamble channels are used to transmit the preamble as specifically recited in claim 1.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 7, 8, 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 7 recites the limitation "the redundant preamble channel" in lines 3-4.

There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the redundant preamble channel" in lines 2-3.

There is insufficient antecedent basis for this limitation in the claim.

### ***Allowable Subject Matter***

8. Claims 1, 5, 12-14 and 20 are allowed. Claims 2-4 would be allowable if rewritten to overcome the claim objections above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M Fan whose telephone number is (703) 305-0198. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (703) 305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Chieh M Fan  
Primary Examiner  
Art Unit 2634

cmf  
March 9, 2004